United States
Environmental Protection
Agency

Office of Prevention,
Pesticides
and Toxic Substances
(7501C)

# PESTICIDE FACT SHEET

Name of
Active Ingredient: **(E)-9-Dodecenyl Acetate Pheromone**
OPP Chemical Code: 119004

## SUMMARY

9-Dodecenyl acetate is a technical pheromone containing the (E) and (Z) isomers. It is for use in manufacturing pheromone based products to control lepidopterous insects, such as moths. The (Z) isomer has been already registered. The new active ingredient is the (E)-9-dodecenyl acetate pheromone. The technical is to be used in traps, dispensers, and sprays to help control destructive lepidopterous insects (moths), in forests and agricultural applications Available information indicates that use of this pheromone is not expected to harm humans, pets, or wildlife.

## I. DESCRIPTION OF THE ACTIVE INGREDIENT

Pheromones are compounds produced and secreted by insects that function in a non-toxic manner to alter insect behavior (e.g., male attraction). 9-Dodecenyl acetate pheromone is a chemical attractant intended for use in preventing damage caused by moths (borers), by interfering with mating commiunications of adult moths. Disruption of the mating process results in a decrease in egg laying and subsequent larval infestations. Many animals and plants produce pheromones, which are usually volatile chemicals with strong odors. Organisms produce pheromones in order to modify the behavior of other members of the same species, for example, to attract mates or to discourage animals from crossing territorial boundaries. In general, each species produces its own specific pheromones.

## II. USE SITES, TARGET PESTS, AND APPLICATION METHODS

Use sites: The technical grade active ingredient is a manufacturing use product to be formulated into end-use pheromone based products (such as traps, dispensers and sprays) for use in forests and agricultural applications.

Target pests: Lepidopterous insects, such as borer moths (e. g. Eastern pine shoot borer).

Application methods: The pheromone can be used as a spray, in traps and dispensers.

## III. ASSESSING RISKS TO HUMAN HEALTH

Exposure to the subject pheromone is not expected to pose any health risks to adults, children or other sensitive populations. No adverse effects have ever been reported for pheromone products. The pheromones registered to date are of minimal toxicity to humans and the environment.

Whether or not a substance poses a risk to humans or other organisms depends on two factors: how toxic the substance is, and how much of it an organism is exposed to. Therefore, the EPA considers toxicity data and exposure data in determining whether to approve a pesticide for use.

## IV. ASSESSING RISKS TO THE ENVIRONMENT

Available information suggests that dodecenyl acetate pheromone is not harmful to non-target organisms or to the environment. The requirements for data were waived due to low acute toxicity in mammalian species, lack of exposure, lack of persistence in the environment and a history of safe use of lepidopteran pheromones.

## V. REGULATORY INFORMATION

(E)-9-Dodecenyl acetate pheromone was registered (licensed for use) in 1999. As of May 1999, EPA had approved three pesticide products with this pheromone as the active ingredient.

## VI. PRODUCER INFORMATION

Bedoukian Research, Inc.(Chemical manufacturer)
Danbury, CT 06810-4192

3M Canada(Producer of end-use)
3M Center, St. Paul MN 55144

## VII. FOR FURTHER INFORMATION, CONTACT:

- See Registration Eligibility Document, attached in hard copy, or at LINK
- Contact:

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